



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,545	04/26/2001	Dennis P. Bobay	03-DV-7090	9760

23465 7590 02/21/2002

JOHN S. BEULICK  
C/O ARMSTRONG TEASDALE, LLP  
ONE METROPOLITAN SQUARE  
SUITE 2600  
ST LOUIS, MO 63102-2740

EXAMINER

CUEVAS, PEDRO J

ART UNIT PAPER NUMBER

2834

DATE MAILED: 02/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/681,545

**Applicant(s)**

BOBAY ET AL.

**Examiner**

Pedro J. Cuevas

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2834

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of claims of Group II in Paper No. 3 is acknowledged. The traversal is on the ground(s) that the applicant believes the inventions set out by the claims in Groups I and II clearly are related, and a thorough search and examination of either claim group would be relevant to the examination of the other group. This is not found persuasive because the claimed invention and the method of fabricating it are two separate arts requiring completely different searches having different classifications.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-4 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claim Group I, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "34" and "42" have both been used to designate a height. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:  $\Phi$  (Figures 2 and 5), and 26 (Figure 3). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Specification***

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: External Rotor Cup With Unitary Annular Flange.

6. The disclosure is objected to because of the following informalities: according to Figure 2, rotor cup first diameter 28 is the same as annular flange inside diameter 38, which is described in the specification with a 28. It is believed by the examiner that this is a typographical error.

Appropriate correction is required.

***Claim Objections***

7. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 5-10 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,986,379 to Hollenbeck et al.

Hollenbeck et al. clearly teaches the construction of a rotor cup assembly for an electric motor, said rotor cup assembly (230) comprising a housing comprising:

a top,

a bottom,

a sidewall (232) extending circumferentially from said top and having a first diameter, said sidewall and said top defining a cavity, and

an annular flange (added by the examiner) extending circumferentially from said sidewall and having a first diameter, a second diameter, and a first thickness, said first diameter less than said second diameter.

10. With regards to claim 6, 7, 9 and 10 Hollenbeck et al. discloses a rotor cup assembly, wherein:

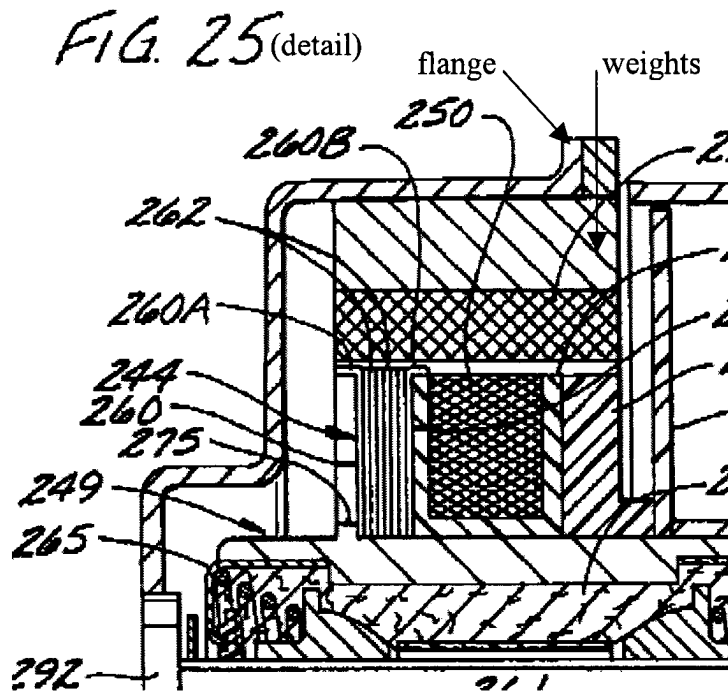
said annular flange is configured to have an edge, said edge outwardly flared from said sidewall by an angle  $\Phi$ ;

said annular flange configured to receive a plurality of weights (added by the examiner) to facilitate a desired level of rotor balance;

said annular flange second diameter greater than said housing sidewall first diameter;

said annular flange provides a smooth surface for pressing an item into said rotor cup;

as shown in Figure 25.



11. With regards to claim 8, the method of forming the device, in this particular case configuring the annular flange to achieve a desired level of rotor balance, is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

12. Referring to claim 8, no patentable weight has been given to the method of manufacturing limitations (i. e. machined), since “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Art Unit: 2834

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,986,379 to Hollenbeck et al. in view of U.S. Patent No. 6,051,900 to Yamaguchi.

Hollenbeck et al. discloses an electric motor comprising:

a stator including a stator core having a winding (250) thereon,

a rotor positioned at least partially around said stator,

a rotor shaft (234) positioned at least partially within said rotor, and

a rotor cup (230),

said rotor cup comprising:

a housing comprising:

a top,

a bottom,

a sidewall (232), and

an annular flange (added by the examiner),

said sidewall extending circumferentially from said top and having

a first diameter,

said annular flange extending circumferentially from said sidewall

and having:

a first diameter,

Art Unit: 2834

a second diameter, and  
a first thickness,  
said first diameter less than said second diameter.

However, it fails to disclose a rotor shaft extending through said rotor cup.

Yamaguchi teaches the construction of a flat coreless vibration motor having a rotor shaft (2) extending through a bracket (1) for the purpose of supporting and physically connecting the eccentric rotor (3) to the bracket.

It would have been obvious to one skilled in the art at the time the invention was made to use the rotor shaft extending through a rotor cup as disclosed by Yamaguchi on the electric motor disclosed by Hollenbeck et al. for the purpose of supporting and physically connecting the eccentric rotor (3) to the bracket.

15. With regards to claims 12 and 16, Yamaguchi discloses:

a rotor cup top including an opening (1a) sized to accept said rotor shaft; and  
an electric motor comprising an inside-out motor comprising an external rotor having magnetic elements (6) mounted on said rotor and said stator located inside the magnetic elements.

16. With regards to claim 13 and 15, Hollenbeck et al. discloses a rotor cup:

configured to receive a plurality of weights (added by the examiner) to facilitate a desired level of rotor balance; and

wherein said annular flange second diameter is greater than said housing sidewall first diameter;

as shown in Figure 25.



Art Unit: 2834

17. With regards to claim 14, the method of forming the device, in this particular case configuring the annular flange to achieve a desired level of rotor balance, is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

18. Referring to claim 14, no patentable weight has been given to the method of manufacturing limitations (i. e. machined), since “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Néstor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Application/Control Number: 09/681,545

Page 9

Art Unit: 2834

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas  
February 15, 2002

  
NESTOR RAMIREZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800